

Work Order ID 91908

91908

Page 1

October-19-12 2:22:50 PM

Item ID: D350-591-311

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Heli-Access-Step, Long LH

Start Date: 10/19/12 Start Qty: 10.00

10

Cust Item ID: \

Required Date: 11/16/12 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12-10-22 Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3272

Rev B

100

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and type labels as per PPP D350-591-311 CHG001

110

0.00

110

Large Fab

Large Fab

Memo

0.00

Large Fab

1-Bevel end for welding FWD ONLY

2-Weld Support using Jig DT8719, weld Fwd End Plate as per QSI 004 & Dwg D3272

A/RAluminum Rod 122358

122399

3-Grind End Plate flush

DAS
15
2-89

121121

10 10 44 MLJ 12-11-20
(10)

10 φ 12.11.12

91908

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N9000401.00

Setup Start *NS1*

Stop ***NS2***

10

10

Reference:

Run Start *NR1*

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

120

QC9- Inspect visual per QSI004- Fusion Welds

0.00

120

QC

Memo

0.00

Quality Control

130

QC5- Inspect part completeness to step on W/O

0.00

130

QC

Memo

0,00

Quality Control

140

Chemical Conversion Coat per QSI005 4.1

0.00

140

HandFinish

Memo

0.00

Hand Finishing

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Item ID: D350-591-311

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Heli-Access-Step, Long LH

Start Date: 10/19/12 Start Qty: 10.00

10

Cust Item ID:

Required Date: 11/16/12 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150

QC Inspect Part Finish

0.00

150

QC

Memo

0.00

Quality Control

10

Ø

DA
23
89

180

Large Fab

0.00

180

Large Fab

Memo

0.00

Large Fab

1-Assemble Leg Assembly as per Dwg D3272.

2-Leave one rivet out until welding is complete.

3-Bevel Aft end for welding

4-Inspect for foreign object as per QSI 024

5-Weld Aft End Plate as per QSI 004 & Dwg D3272
A/RAluminum Rod 122358

6-Grind End Plate flush

7-Install last rivet as per Dwg.

10

Ø

12.11.14
Ac 12.11.15

Work Order ID 91908

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October-19-12 2:22:50 PM

Item ID: D350-591-311

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Heli-Access-Step, Long LH

Start Date: 10/19/12 Start Qty: 10.00

10

Cust Item ID:

Required Date: 11/16/12 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC10- Inspect visual per QSI004- ground welds	0.00							
190									
QC	Memo	0.00							
Quality Control									
200	QC5- Inspect part completeness to step on W/O	0.00							
200									
QC	Memo	0.00							
Quality Control									
210	Chemical Conversion Coat per QSI005 4.1	0.00							
210									
HandFinish	Memo	0.00							
Hand Finishing									

DAS
09
8-89

DAS
09
8-89

10 X ~~Ø~~ 12/11/16

Work Order ID 91908

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Item ID: D350-591-311

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Heli-Access-Step, Long LH

Start Date: 10/19/12 Start Qty: 10.00

10

Cust Item ID:

Required Date: 11/16/12 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
220									
Powdercoat									
Powder Coating									
mi 22878									
230	Wing Walk as per dwg QSI005 4.4 Batch	0.00							
230									
HandFinish									
Hand Finishing									
240	QC3- Inspect Part Finish	0.00							
240									
QC									
Quality Control									

Memo

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

Memo

Memo

10 X ~~0~~ 12/11/19
LH
10 ~~0~~ 12/11/19
10 ~~0~~ 12/11/19

Work Order ID 91908

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Item ID: D350-591-311

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Heli-Access-Step, Long LH

Start Date: 10/19/12 Start Qty: 10.00

10

Cust Item ID:

Required Date: 11/16/12 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
280	QC21- Final Inspection - Work Order Release	0.00							
280									
QC	Memo	0.00							
Quality Control									

12/11/22 JJ
MK
12-11-22

Picklist Print

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Page 1

Work Order ID: 91908

Parent Item: D350-591-311

Parent Item Name: Heli-Access-Step, Long LH

Start Date: 10/19/12

Required Date: 11/16/12

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP Rev:A04.03.22New issue KJ/RF
IPP Rev:B 07-06-09 Added D3272-1 JLM
IPP C returned to CHG001 for Eurocopter, ref NCR08-082 LL verified by:EC
route seq in bom DD 10.04.28 verified by:EC

IPP Rev:D fixe

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3272-1 Step		Manufactured	No			110	Each	20.0000	1	10		12.10.31	

Location

Loc Qty

Loc Code

ST 892141 → -10
WA 30
86573 5
91756 10
91757 5

10x

D3067-1
End Plate

Manufactured No

110

Each

226.0000

1

10

12.11.12

Location

Loc Qty

Loc Code

WA 222
78608 4
83855 1
90177 15
90178 22
90335 60
90336 60
90486 60
WA016 4
67582 2
68214 1
79607 1

10

Picklist Print

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Page 2

Work Order ID: 91908

Parent Item: D350-591-311

Parent Item Name: Heli-Access-Step, Long LH

Start Date: 10/19/12

Required Date: 11/16/12

Start Qty: 10.00

Required Qty: 10.00

D3219-1
Plate

Manufactured No

110 Each 274.0000 2 20

12.11.12

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
WA	256	
88888	12	
89966	108	
89967	108	
90704	28	
WA016	18	
73410	12	
77674	6	

20

D3066-1
Spacer

Manufactured No

180 Each 179.0000 2 20

12.11.14

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
WA	179	
90211	30	
90212	60	
90346	29	
90347	60	

20

MS20600-AD4W4
Rivets

Purchased No

180 Each 1,578.0000 16 160

12.11.14

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
321	18	
121652	18	
ST311	1000	
123021	1000	
ST321	560	
121011	9	
121340	39	
121444	512	

160

Picklist Print

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Page 3

Work Order ID: 91908

Parent Item: D350-591-311

Parent Item Name: Heli-Access-Step, Long LH

Start Date: 10/19/12

Required Date: 11/16/12

Start Qty: 10.00

Required Qty: 10.00

D3065-041
Step Leg Assembly Hi

Manufactured No

180 Each 21.0000 1 10

12.11.14

Location	Loc Qty	Loc Code
ST	-30	
WA <u>390012</u>	21	
66149	0	
79336	1	
88822	5	
90011	15	
WA013	30	

10

D3067-1
End Plate

Manufactured No

180 Each 226.0000 1 10

12.11.14

Location	Loc Qty	Loc Code
WA	222	
78608	4	
83855	1	
90177	15	
90178	22	
90335	60	
<u>90336</u>	60	
90486	60	
WA016	4	
67582	2	
68214	1	
79607	1	

4/6

ANS-351
Bolt

Purchased No

250 Each 190.0000 2 20

SP 12-11-20

Sm's 107

Location	Loc Qty	Loc Code
FG	10	
122800	10	
ST353	180	
<u>123352</u>	180	

20x

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Shop Packet Print

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Picklist Print

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Page 4

Work Order ID: 91908

Parent Item: D350-591-311

Parent Item Name: Heli-Access-Step, Long LH

Start Date: 10/19/12

Required Date: 11/16/12

Start Qty: 10.00

Required Qty: 10.00

D3235-1
Mounting Lug

Manufactured No

250 Each 126.0000

2

20

SP

SP

Sms 10x

Location

Loc Qty

Loc Code

ST470

126

90002

126

D3278-041
Support Assembly

Sms 10x

Manufactured No

250 Each 0.0000

20x

10

B89974 (A) SP

AN960JD416
Washer

NAS1149D0463J

Purchased No

250 Each 29.0000

16

160

m123355

SP

Sms 10x

Location

Loc Qty

Loc Code

ST351

29

116289

8

119097

21

AN960JD516
Washer

NAS1149D0563J

Purchased No

250 Each 2.0000

4

40

m123355 SP

SP

Sms 10x

Location

Loc Qty

Loc Code

ST338

2

1069059

2

AN5-36A
Bolt

Purchased No

250 Each 46.0000

2

20

m123525 SP

SP

Sms 10x

Location

Loc Qty

Loc Code

ST338

46

123021

46

D2618
Bushings

Manufactured No

250 Each 5.0000

2

20

B892530

SP12-11-20

SP

Sms 10x

Location

Loc Qty

Loc Code

ST013

5

76130

2

84646

3

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Shop Packet Print

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Picklist Print

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Page 5

Work Order ID: 91908

Parent Item: D350-591-311

Parent Item Name: Heli-Access-Step, Long LH

Start Date: 10/19/12

Required Date: 11/16/12

Start Qty: 10.00

Required Qty: 10.00

D2230-3

Lug

Manufactured No

250

Each

316.0000

4

40

SP

SL

Location

Loc Qty

Loc Code

FG

1

89045

1

ST469

315

89782

19

89950

200

90514

96

40x

D2856-400

Abrasion Strip

Manufactured No

250

f

409.2539

12

12

SP. 12-11-29

SL

Location

Loc Qty

Loc Code

ST403

120.2525

81875

6.398

89352

113.8545

ST408

216

90764

216

ST409

73.0014

63735

0.6696

68076

0.3149

71164

8.46

86905

63.5569

12x

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Picklist Print

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Page 6

Work Order ID: 91908

Parent Item: D350-591-311

Parent Item Name: Heli-Access-Step, Long LH

Start Date: 10/19/12

Required Date: 11/16/12

Start Qty: 10.00

Required Qty: 10.00

MS21042L3

Purchased

No

250

Each

3,340.0000

2

20

SP

SK

Nut

Location

Loc Qty

Loc Code

316

651

122452

651

ST300

338

117885

32

119017

168

119075

138

ST314

1831

123265

1831

20x

ST317

520

122141

520

AN4-13A

Purchased

No

250

Each

1,002.0000

8

80

M123525 SP

12-11-20

SK

Bolt

Location

Loc Qty

Loc Code

ST356

809

122416

287

122808

22

122993

500

ST357

193

120187

19

120770

12

121652

161

122063

1

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Shop Packet Print

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Picklist Print

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Page 7

Work Order ID: 91908

Parent Item: D350-591-311

Parent Item Name: Heli-Access-Step, Long LH

Start Date: 10/19/12

Required Date: 11/16/12

Start Qty: 10.00

Required Qty: 10.00

MS21042L5

Purchased

No

250

Each

1,253.0000

2

20

Nut

Location

Loc Qty

Loc Code

300

173

121652

173

314

1000

122452

1000

ST300

80

108827

4

116105

1

116548

43

119109

20

2937

12

MS21042L4

Purchased

No

250

Each

5,326.0000

8

80

Nut

Location

Loc Qty

Loc Code

314

1399

122452

1399

ST300

27

119017

20

121444

7

ST314

3900

123021

3000

123248

900

AN960JD10

NAS1149D0363J

Purchased

No

250

Each

0.0000

Washer

October-19-12 2:22:50 PM

Shop Packet Print

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DESIGN <i>qp</i>	DRAWN BY <i>B</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>LE</i>	APPROVED <i>H</i>	DRAWING NO. D3272	REV. B SHEET 1 OF 3
DATE 07.05.18		TITLE STEP ASSEMBLY, HI LONG	SCALE NFS
A	04.03.01	NEW ISSUE	
B	07.05.18	D3272-1 WAS D2622-120	

RELEASED

07.06.04

QTY -041	QTY -042	PART NUMBER	DESCRIPTION
X		D3272-041	STEP ASSEMBLY, HIGH LONG (LH)
	X	D3272-042	STEP ASSEMBLY, HIGH LONG (RH)
1	1	D3065-041	LEG ASSEMBLY
2	2	D3066-1	SPACER
2	2	D3067-1	END PLATE
2	2	D3219-1	SUPPORT
1	1	D3272-1	STEP
16	16	MS20600AD4W4	RIVET

GENERAL NOTES:

- 1) D3272-041 SHOWN. FOR D3272-042, INSTALL D3219-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005.4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005.4.3
BLACK ANTI-SKID PAINT PER DART QSI 005.4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX.

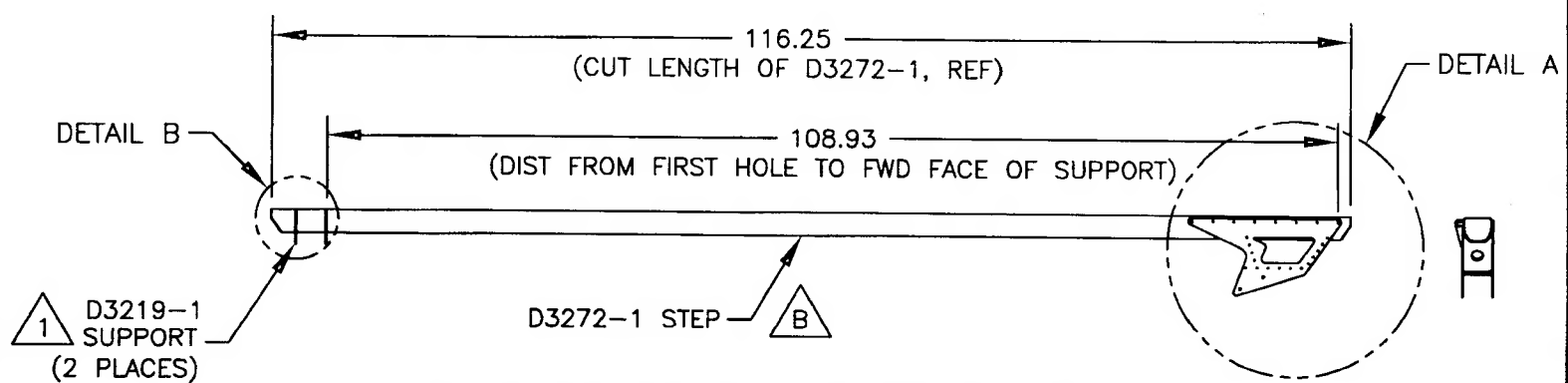
SHR 07
RTH 07
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO 91908MCS

12-10-22

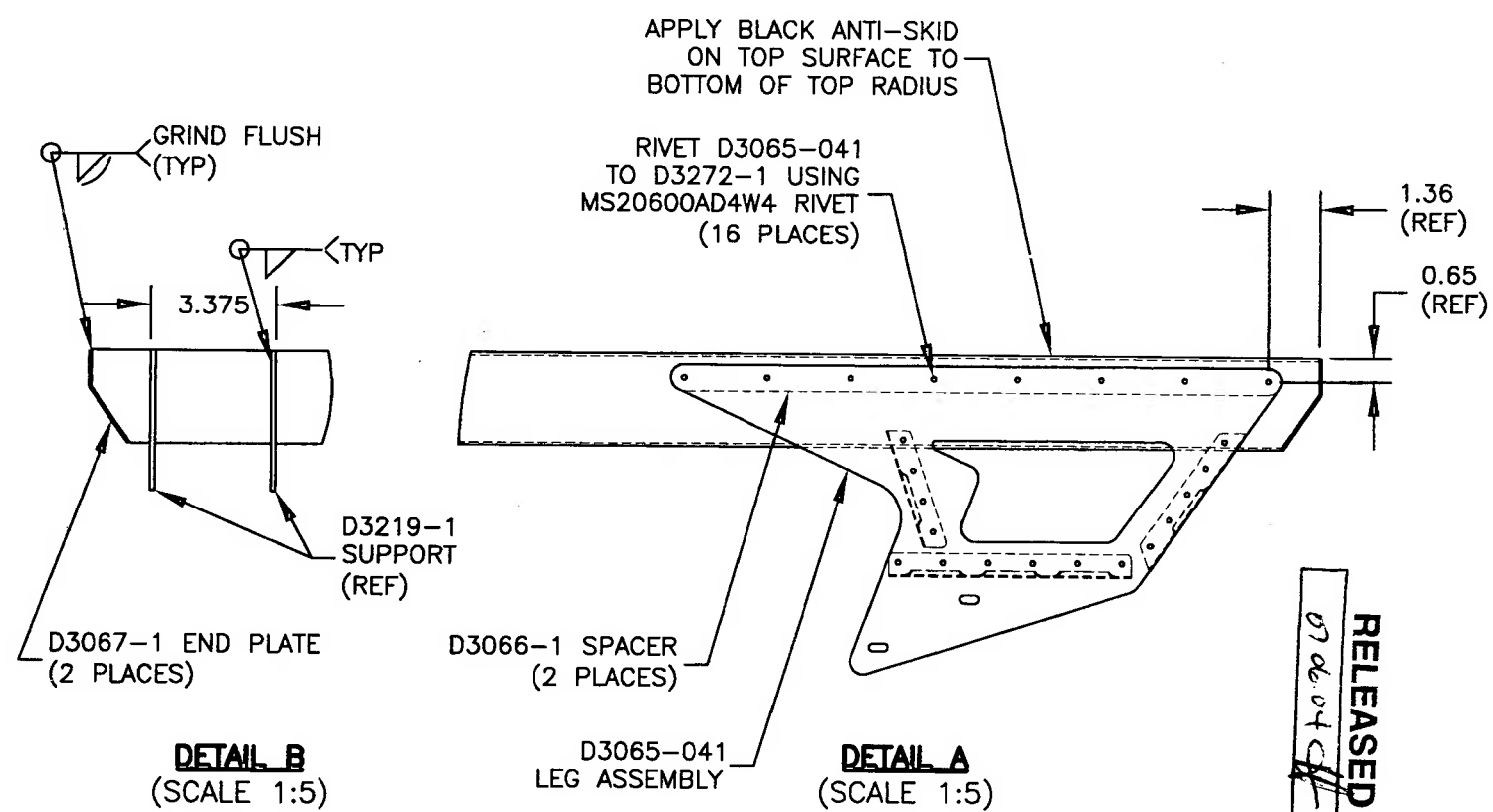
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91908



D3272-041 STEP ASSEMBLY (LH. SHOWN)
D3272-042 STEP ASSEMBLY (RH, OPPOSITE)



DESIGN	90	DRAWN BY		DART AEROSPACE LTD
CHECKED	CE	APPROVED		HAWKESBURY, ONTARIO, CANADA
DATE	07.05.18	TITLE	STEP ASSEMBLY, HI LONG	REV. B
		DRAWING NO.	D3272	SHEET 2 OF 3
		SCALE	1:20	

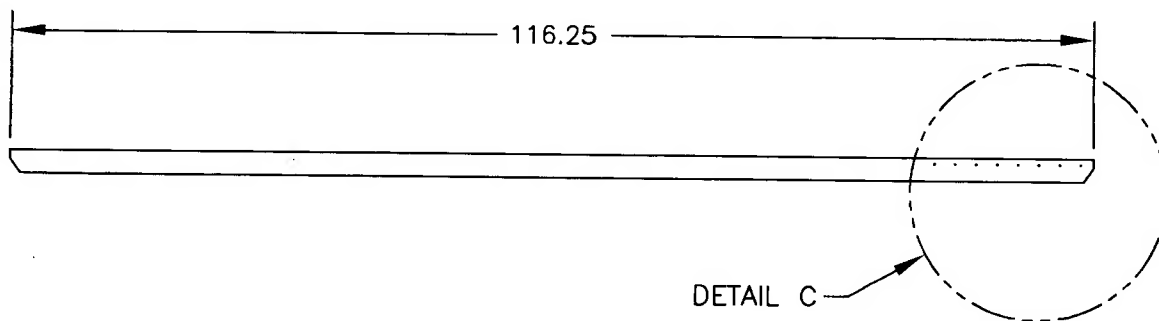
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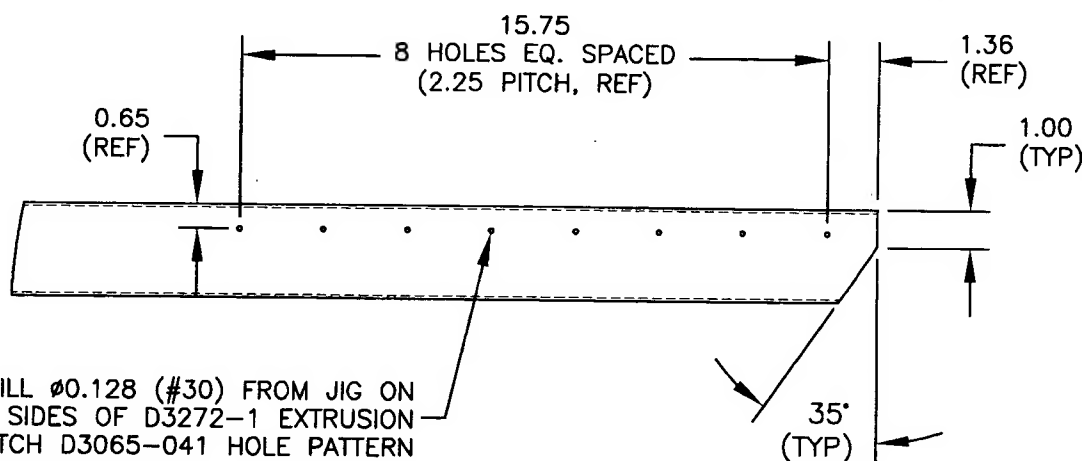
91908



DESIGN	90	DRAWN BY	JR	DART AEROSPACE LTD
CHECKED	CE	APPROVED	JR	HAWKESBURY, ONTARIO, CANADA
DATE	07.05.18	DRAWING NO.	D3272	REV. B
		TITLE	STEP ASSEMBLY, HI LONG	SHEET 3 OF 3
		SCALE	1:20	



B **D3272-1 STEP**
(MAKE FROM D2622-120 STEP EXTRUSION)



DRILL $\varnothing 0.128$ (#30) FROM JIG ON BOTH SIDES OF D3272-1 EXTRUSION TO MATCH D3065-041 HOLE PATTERN

DETAIL C
(SCALE 1:5)

RELEASED

07.06.04

REF

ONLY

Sms

DART AEROSPACE LTD.

D350-591
Page 23 of 23

Qty -211	Qty -212	Qty -213	Qty -214	Qty -215	Qty -216	Qty -311	Qty -312	Part Number	Description
X								D350-591-211	Heli-Access-Step™, Long Step – High Skid, LH
	X							D350-591-212	Heli-Access-Step™, Long Step – High Skid, RH
		X						D350-591-213	Heli-Access-Step™, Short Step – High Skid, LH
			X					D350-591-214	Heli-Access-Step™, Short Step – High Skid, RH
				X				D350-591-215	Heli-Access-Step™, Short Step – Low Skid, LH
					X			D350-591-216	Heli-Access-Step™, Short Step – Low Skid, RH
						X		D350-591-311	Heli-Access-Step™, Long Step – High Skid, LH
							X	D350-591-312	Heli-Access-Step™, Long Step – High Skid, RH
1								D3070-041	STEP ASSEMBLY (HIGH-LONG, LH)
	1							D3070-042	STEP ASSEMBLY (HIGH-LONG, RH)
		1						D3078-041	STEP ASSEMBLY (HIGH-SHORT, LH)
			1					D3078-042	STEP ASSEMBLY (HIGH-SHORT, RH)
				1				D3168-041	STEP ASSEMBLY (LOW-SHORT, LH)
					1			D3168-042	STEP ASSEMBLY (LOW-SHORT, RH)
						1		D3272-041	STEP ASSEMBLY (HIGH-LONG, LH)
							1	D3272-042	STEP ASSEMBLY (HIGH-LONG, RH)
4	4							D2182B035	RUBBER CUSHION
		2	2	2	2			D2230-1	MOUNTING LUG
		2	2	2	2	4	4	D2230-3	MOUNTING LUG
8	8					2	2	D2274	RADIUS BLOCK
						2	2	D2618	BUSHING
4	4	4	4	4	4			D2732-030	CUSHION
2	2	1	1	1	1	2	2	D2856-400-720	ABRASION STRIP
2	2							D3064-1	CLAMP
1	1							D3079-041	SUPPORT ASSEMBLY
4	4							D3080-1	CLAMP
						2	2	D3235-1	MOUNTING LUG
						1	1	D3278-041	SUPPORT ASSEMBLY
2	2	2	2	2	2	2	2	AN3-35A	BOLT
10	10	2	2	2	2			AN4-11A	BOLT
		4	4	4	4	8	8	AN4-13A	BOLT
						2	2	AN5-36A	BOLT
4	4	4	4	4	4	4	4	AN960JD10	WASHER
20	20	12	12	12	12	16	16	AN960JD416	WASHER
						4	4	AN960JD516	WASHER
2	2	2	2	2	2	2	2	MS21042L3	NUT
10	10	6	6	6	6	8	8	MS21042L4	NUT
						2	2	MS21042L5	NUT
						1	1	DSI 9410-011	STEP MODIFICATION KIT

*DSI 9410-011 Step Modification Kits are provided with all D350-591-311 and D350-591-312 Steps. This kit is provided as an option for the installer and is therefore **NOT REQUIRED** to complete the installation of the D350-591-311 or D350-591-312 Steps. Refer to Figure 21 for installation of the DSI 9410-011 Kit.

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Revision: **G**

Date: 08.10.06